

Amendments to the Claims:

1. (currently amended) A method for producing a fibrin sealant comprising mixing a human recombinant fibrinogen, recombinant human thrombin, recombinant human factor XIII and calcium ions together, wherein the fibrinogen is present at a concentration in solution of 20-30 mg/ml, the factor XIII is present in solution at a concentration of 3-10  $\mu$ g of factor XIII per mg of fibrinogen present in solution, the thrombin is present in solution at a concentration of 5-300 I.U./ml, and the calcium ions are present in solution at a concentration of 5-20 mM, and wherein sucrose is mixed at a concentration of about 4.5% with the fibrinogen, the factor XIII, the thrombin and the calcium.

2. (canceled)

3. (currently amended) A fibrin sealant produced according to the ~~process~~ method of claim ~~2~~ 1.